

IN THE CLAIMS

Please replace the claims as filed with the claims set forth below.

1-21. Cancelled.

22. (New) A detection system comprising a light emitting diode (LED) having at least one (semi)conductive electroluminescent active layer which comprises at least two different electroluminescent functionalities, wherein the emission spectrum of the diode exhibits at least two intensity maxima and wherein the active layer comprises at least one electroluminescent organic compound.

23. (New) The detection system according to claim 22, wherein the LED comprises an electroluminescent compound selected from a group consisting of electroluminescent polymers, electroluminescent oligomeric dyes and electroluminescent single dyes.

24. (New) The detection system according to claim 22, wherein the LED comprises an electroluminescent polymer and an electroluminescent single dye.

25. (New) The detection system according to claim 22, wherein two different electroluminescent functionalities are formed by a first and a second electroluminescent compound, wherein the first compound has a maximum in the emission spectrum at a different wavelength than the second compound.

26. (New) The detection system according to claim 22, wherein at least two different electroluminescent functionalities form part of one electroluminescent compound.

27. (New) The detection system according to claim 26, wherein the compound is selected from a group consisting of copolymers having at least two different electroluminescent segments, electroluminescent polymers derivatized with at least one

electroluminescent dye, and non-electroluminescent compounds, derivatized with at least two different electroluminescent dyes.

28. (New) The detection system according claim 22, wherein at least one electroluminescent compound is selected from a group consisting of poly(paraphenylene vinylene) compounds, polyfluorene compounds, copolymers of said polymers and polymers derivatized with one or more of said dyes.

29. (New) The detection system according to claim 22, wherein the emission spectrum of the LED is bimodal.

30. (New) The detection system according to claim 22, wherein the difference in wavelength between two consecutive maxima in the emission spectrum of the LED is at least 40 nm.

31. (New) The detection system according to claim 22, wherein the LED's emission spectrum has at least one maximum, preferably at least two maxima, in the wavelength range of 190-1500 nm, preferably of 400-800 nm.

32. (New) The detection system according to claim 22, wherein the intensity ratio between two consecutive maxima in the emission spectrum is in the range of 0.5 to 1.

33. (New) The detection system according to claim 22, wherein in the emission spectrum the peak to valley ratio of the first and the second maximum is at least 2.

34. (New) The detection system according to claim 22, wherein the LED comprises a filter.

35. (New) The detection system according to claim 34 wherein the LED comprises a filter with notch filter properties, which filter selectively has at least a reduced transmission of light of a wavelength between two consecutive intensity maxima.

36. (New) The detection system according to claim 22, wherein the LED, depending on the direction of the electric current through the active layer, emits light having a first intensity maximum or, conversely, light having a second intensity maximum, different from the first intensity maximum.

37. (New) A light emitting diode having at least one (semi)conductive electroluminescent active layer which comprises at least two different electroluminescent functionalities, wherein the emission spectrum of the diode exhibits at least two intensity maxima, wherein the LED comprises an electroluminescent polymer and an electroluminescent single dye.

38. (New) A light emitting diode having at least one (semi)conductive electroluminescent active layer which comprises at least two different electroluminescent functionalities, wherein the emission spectrum of the diode exhibits at least two intensity maxima, wherein the LED comprises a polyfluorene, which may be a polyfluorene copolymer and/or a polyfluorene derivatised with an electroluminescent dye.

39. (New) A light emitting diode having at least one (semi)conductive electroluminescent active layer which comprises at least two different electroluminescent functionalities, wherein the emission spectrum of the diode exhibits at least two intensity maxima, wherein the LED comprises a filter, preferably a filter with notch filter properties, which filter selectively has at least a reduced transmission of light of a wavelength between two consecutive intensity maxima.

40. (New) A method for manufacturing a light emitting diode comprising:
providing at least one (semi)conductive electroluminescent active layer which comprises at least two different electroluminescent functionalities, wherein the emission spectrum of the light emitting diode exhibits at least two intensity maxima; and
applying at least one active layer to an electrode, which active layer comprises at least one electroluminescent compound as defined in claim 1.

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41. (New) The method according to claim 40, wherein the light emitting diode is applied by means of spin coating or printing.